

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

Claims 1-14 (Cancelled).

15. (New) A process for countering the vibrations induced in an aircraft by the windmilling of an engine fan, the process comprising:

producing a first electric flight control command for a servocontrol to use in actuating a control surface of the aircraft;

slaving the servocontrol to the first electric flight control command;

limiting the operation of the servocontrol to a reduced frequency band;

monitoring vibrations induced by the windmilling of the fan; and

executing, when the monitored vibrations exceed a threshold, the operations of:

computing a second electric flight control command, for application to the servocontrol, that operates to oppose the induced vibrations;

summing the first and second electric flight control commands to produce an overall control command for the control surface;

temporarily slaving the servocontrol to the overall control command; and

operating the servocontrol in a widened frequency band.

16. (New) The process of claim 15, wherein monitoring the induced vibrations comprises:

performing accelerometric measurements of the induced vibrations at a point of the aircraft; and

comparing the amplitude of the accelerometric measurements, whose frequencies are between 5 Hz and 15 Hz, to the threshold.

17. (New) The process of claim 16, wherein the accelerometric measurements are performed at the engines.

18. (New) The process of claim 15, wherein, to compute the second electric flight control command, accelerometric measurements of the induced vibrations are made at a location of the aircraft and the second electric flight control command is determined on the basis of preestablished relations between

prospective accelerometric measurements and prospective flight control commands.

19. (New) The process of claim 18, wherein the flight deck is the location where the accelerometric measurements are made for computing the second electric flight control command.

20. (New) The process of claim 18 applied to an aircraft comprising two pairs of symmetric control surfaces, wherein the aircraft is steered by a vertical electric flight control command and a lateral electric flight control command, the process further comprising:

computing a third electric flight control command to counter the vertical component of the induced vibrations measured at the location;

computing a fourth electric flight control command to counter the lateral component of the induced vibrations measured at the location;

summing the vertical electric flight control command and the third electric flight control command to obtain an overall vertical control command;

summing the lateral electric flight control command and the fourth electric flight control command to obtain an overall lateral control command;

slaving servocontrols of a first of the two pairs of symmetric control surfaces to the overall vertical control command such that the first pair of control surfaces deflect symmetrically in the same direction; and

slaving servocontrols of a second of the two pairs of symmetric control surfaces to the overall lateral control command such that the second pair of control surfaces deflect anti-symmetrically in opposite directions.

21. (New) A system of electric flight controls for an aircraft, the system comprising:

a means for detecting vibrations induced in the aircraft by the windmilling of an engine fan;

a means of measuring the induced vibrations at a location of the aircraft;

a table that stores preestablished relations between prospective vibration measurements and prospective control surface operations to counter the induced vibrations;

a means for computing a vibration-counteracting electric flight control command, in accordance with a vibration measurement and

its related control surface operation, that will counter the induced vibrations when applied to a control surface;

a means for summing an electric flight control command and the vibration-counteracting electric flight control command into an overall control command for the control surface; and

a first means for temporarily slaving a servocontrol of the control surface to the overall control command and operating the servocontrol in a widened frequency band.

22. (New) The system of claim 21, wherein the detecting means comprises accelerometers located at the engine of the aircraft.

23. (New) The system of claim 21, wherein the measuring means comprises accelerometers located in the flight deck of the aircraft.

24. (New) The system of claim 21, further comprising:
a second means for slaving the control surface servocontrol to operate according to a reduced frequency band; and
a means for switching control of the servocontrol between the first and second slaving means, wherein:

the servocontrol is controlled by the second slaving means when the measured induced vibrations do not exceed a threshold, and

the servocontrol is controlled by the first slaving means when the measured induced vibrations exceed the threshold.

25. (New) The system of claim 21, wherein the first and second slaving means consist essentially of the same hardware items, some of which are adjustable so as to allow the frequency band to be varied.

26. (New) The system of claim 21, wherein the computing means is enabled by the detecting means when the measured induced vibrations exceed a particular amount.

27. (New) The system of claim 21, further comprising:
two pairs of symmetric control surfaces, the system of electric flight controls producing for the two pairs of control surfaces a vertical electric flight control command and a lateral electric flight control command, wherein:

the measuring means measures the vertical and lateral components of the induced vibrations;

the computing means computes a first and a second electric flight control command to counter, respectively, the measured vertical and lateral components of the induced vibrations;

the summing means adds:

the vertical electric flight control command and the first electric flight control command to form a first overall control command;

the lateral electric flight control command and the second electric flight control command to form a second overall control command; and

the first temporary slaving means slaves to the first overall control command servocontrols for a first of the two pairs of symmetric control surfaces such that the first pair of control surfaces deflect symmetrically in the same direction; and

the first temporary slaving means slaves to the second overall control command servocontrols for a second of the two pairs of symmetric control surfaces such that the second pair of control surfaces deflect anti-symmetrically in opposite directions.

28. (New) The system of claim 21, wherein the computing means is an integral part of the system of electric flight controls.